THE FATES OF
VERY ANCIENT REMAINS

Sarah Anzick (in red jacket) places dirt in the grave of the Clovis-age child who was reburied in a public ceremony.

VERY FEW HUMAN REMAINS OVER 8,000 YEARS OLD HAVE BEEN FOUND IN AMERICA. SCIENTISTS AND NATIVE AMERICANS HAVE WAGED BITTER LEGAL BATTLES FOR THE CUSTODY OF SOME OF THESE RARE SKELETONS, WHILE AMICABLY AGREED ON THE REPATRIATION AND REBURIAL OF OTHERS. STILL OTHER REMAINS HAVE RESTED PEACEFULLY IN MUSEUMS FOR DECADES.

BY MIKE TONER

TO some Native Americans, the repatriation and reburial of very ancient human remains is simple justice. To many archaeologists and other scientists, it’s akin to reburying the Rosetta stone. “Every burial is a potential loss for science to learn about America’s past and for Native Americans to learn about their ancestors,” said Eske Willerslev, director of the Copenhagen-based Center of Excellence in GeoGenetics, where studies of ancient human DNA are reshaping what is known about the peopling of the Americas. “But science can no longer ignore the wishes of native communities. If we take a confrontational approach, science will lose. And so will they.”

Earlier this year, 8,600-year-old Kennewick Man, whose remains were discovered more than twenty years ago in eastern Washington, was repatriated to the Colville, Yakama, Umatilla, and Nez Perce tribes, who claimed him as their ancestor. The tribes then reburied the skeleton at a secret location in the Columbia River Basin. The tribes had waged a long, costly, and highly-publicized legal battle to take custody of Kennewick Man under the Native American Graves
Protection and Repatriation Act (NAGPRA), which they lost in 2004 when the court ruled they could not prove a connection to the skeleton.

But recent DNA analysis by Willerslev's laboratory in Denmark showed that Kennewick Man genetically resembled today's Native Americans more than any other living people. Consequently, the U.S. Army Corps of Engineers, Kennewick Man's custodians, concluded that he was in fact Native American, and the Corps began the lengthy process of repatriating the skeleton. Wanting to hasten the process, Congress passed a law that expedited the transfer of the skeleton.

The Corps' conclusion was sharply at odds with the conclusions of earlier studies of Kennewick Man's skull and stature that showed him to be quite different from today's Native Americans. Similar differences between DNA and osteological studies have marked other investigations of the most ancient remains.

Last year, DNA analysis also determined the fate of another very ancient skeleton, a desiccated mummy called Spirit Cave Man, who was found in a cave in western Nevada in 1940. Spirit Cave Man was initially thought to be a few thousand years old, but in 1994 improved dating methods showed the mummy to be 10,600 years old, among the oldest human remains ever found in North America. The Fallon Paiute-Shoshone tribe had claimed him as ancestral and demanded his return, despite the fact that he, like Kennewick Man, looked markedly different from contemporary Native Americans.

Another long legal battle ensued between the Native Americans and the Bureau of Land Management (BLM), who had custody of the mummy, though it attracted far less attention than the Kennewick Man lawsuit. As a result of the repatriation claim, the BLM consulted with the tribe about how the remains should be handled. Initially, the tribe was against further research; but in order to settle the custody dispute they did not oppose DNA analysis, according to Bryan Hockett, the BLM's lead archaeologist in Nevada. The results showed that Spirit Cave Man was indeed related to native peoples in the Americas. Last November, the Fallon tribe reclaimed the remains from the Nevada State Museum, where they were housed. The tribe hasn't disclosed the fate of the remains, although they have not ruled out the possibility that they could be studied further.

In 1976, restoration work on the University of California San Diego chancellor's house in La Jolla led to the discovery of two sets of bones that were eventually found to be 9,500 years old. In 2006, the La Posta band of the Kumeyaay tribe demanded that the remains be handed over to them on the basis that the skeletons were discovered on land historically occupied by the tribe. This prompted a flurry of scientific interest in the remains, but in 2011 rebuff to the scientists, the university announced plans to return them. The scientists sued to halt the transfer, but got turned down in federal court. An appellate court rejected their appeal. In 2014,
the U.S Supreme Court did, too. Last year, the remains were returned to the Kumeyaay. Tribal leaders haven’t disclosed what has happened to them since.

There are numerous other sets of extremely ancient remains that have been repatriated and reburied with far less fanfare. When the partial skeleton of a woman was found in a gravel quarry in southern Idaho in 1989, archaeologists were excited to discover that the remains were more than 10,600 years old. When precision measurements of her elongated skull suggested that she resembled modern Polynesians more than contemporary Native Americas, the mystery deepened. But Buhl Woman’s origins will remain a mystery. In 1993 she was returned to the Shoshone-Bannock of Fort Hall and reburied. No DNA testing was done.

A similar fate befell what scientists call Minnesota Woman, the nearly 8,000-year-old remains of a teenager unearthed in 1931 during highway construction in west-central Minnesota. Over nearly seventy years, the bones and skulls were studied sporadically, and questions were raised about who she was and why she had been wearing a pendant made from a conch shell only known to exist in Florida. No DNA testing was done before Minnesota Woman, a.k.a Nimuue, was buried in South Dakota by Sioux tribes in 1999.

The partial skeleton of Gordon Creek Woman, discovered by U.S. Forest Service work crews in northern Colorado in 1963, was curated for decades by the University of Colorado Museum of Natural History. But it wasn’t until 2002 that improved dating techniques showed that the remains were more than 9,000 years old. By then, however, NAGPRA was in force, and in deference to the spirit of the law, researchers...
refrained from doing DNA analysis or other invasive research. Instead, the U.S. Forest Service concluded that, while the bones could not "reasonably be traced" to any present-day tribes, they were undoubtedly Native American. In 2013, they agreed to return the remains to the Northern Cheyenne for rebury at an undisclosed location in Colorado.

Archaeologists and Native Americans have often been at odds since NAGPRA was enacted in 1990. As a result of the law, museums and federal agencies have returned more than 50,000 sets of human remains and one million associated funerary objects to Indian tribes and native Hawaiian organizations. But institutions still have an estimated 120,000 sets of Native American human remains that were previously determined to be "culturally unidentifiable." Under a 2010 addition to NAGPRA regulations, however, tribes may now claim any Native American remains—including any remains removed from lands recognized as a tribe's "aboriginal lands." "NAGPRA is not an authorization to conduct new scientific study for purposes of complying with the law, but returning human remains to a tribe does not preclude further research," said David Tarler, who oversees the program's civil enforcement and regulations for the National Park Service. "It is simply a matter of who has the decision-making authority."

The change to NAGPRA—in a time of major advances in forensics, dating, and DNA analysis—is adding new urgency to efforts to reconcile scientific interest in the most ancient remains, especially those 8,000 years and older, with the wishes of the nation's 567 federally recognized tribes. "Human remains this old are quite rare," said Bradley Lepper, curator of Archaeology at the Ohio History Connection. In a nationwide survey of these very ancient remains he found 324 sets, some of which were nothing more than a few bone fragments. One hundred and fifty-two of these sets were sufficiently intact that their gender could be determined. Without human remains, Lepper said, archaeology is reduced to studying "a stage littered with fragments of scenery and discarded props, but with no actors."

"Kennewick Man had more to tell us, but now we will never know," said University of Tennessee Knoxville anthropologist Richard Jantz, who, in collaboration with Smithsonian Institution forensic anthropologist Doug Owsley, has studied and cataloged many of the ancient remains discovered in North America. "It is not clear whether all, some, or none of these early people can be considered ancestors of contemporary North Americans," Jantz said, noting that Kennewick Man's researchers acknowledged that they were unable to identify a specific tribe that's directly related to the skeleton due to the limited sample size of modern Native Americans, particularly those living in the United States. (NAGPRA defines Native American as being "of or relating to a tribe, people, or culture that is indigenous to the United States.") He contends that new technology and today's exponential increases in computing power would almost surely reveal far more about many of the skeletons that he and Owsley have studied. "Once these remains are buried, they are no longer available to science," he said. "We will never know any more about them."

But that's not to say that all ancient skeletons have been, or face the imminent threat of being, reburied. In fact the fates of these remains vary widely depending on a number of factors such as where and when they were discovered, who is the custodian, and which tribes, if any, express an interest in their return. "It's case by case, tribe by tribe, and location by location," said Michael Waters, director of the Center for the Study of the First Americans at Texas A&M University.

For example, the Santa Barbara Museum of Natural History has, without objection from the local Chumash tribe, cared for the ancient remains of Arlington Springs Man since they were unearthed on Santa Rosa Island in 1959. That, in large part, is because the museum has collaborated closely with the tribal leaders. A Chumash researcher worked with archaeologists to date the 13,000-year-old bones and museum curator John Johnson regularly apprises the tribe of new research. There have been no requests for repatriation. "They treat the remains with great respect," said seventy-eight-year-old Ernestine De Soto, whose mother was the last
known speaker of the Chumash language. "We want to know our origins too," she said, noting that the unusual antiquity of the bones confirms the tribe's creation story: that the Chumash began on Santa Cruz Island and migrated to the mainland on a rainbow bridge.

In 1982 Leanne, an 11,000-year-old fragmentary skeleton, was found near Leander, in central Texas. She has resided ever since at the University of Texas Archaeological Research Laboratory (TARL) in Austin. None of the fifteen tribes contacted by TARL have expressed any interest in claiming her remains. Marybeth Tomka, TARL's head of collections, surmised that this is because the tribes lack the resources necessary to take possession of Leanne. All but two of these tribes are based in other states, and a repatriation claim would require at least two trips to TARL, according to Tomka—one to view the remains, and another to collect them. If the tribe doesn't have land in which to rebury the remains, they would have to acquire it, and there would also likely be other expenses associated with the reburial ceremony.

The federal government allocates money in the form of NAGPRA grants to offset the expenses incurred by a repatriation claim, but these grants aren't easily obtained. Melanie O'Brien, the manager of the National NAGPRA Program, said the program typically gets forty grant requests a year that amount to about $2.5 million, but it only has the money, $1.6 million, to award twenty to twenty-five of them. "The tribes and the repositories compete for the same funds," Tomka said. She thinks NAGPRA is a good law, but she added that "there's just not enough money to go around to implement it."

A lack of funds has also limited the amount of research TARL has done on the remains. "We have used 3-D imaging of the skull to give an idea of what Leanne looked like, but we haven't done as much as we could," said Tomka. "DNA work is still something for the future."

Archaeologists have recovered one hundred and sixty-eight sets of ancient remains, many of which are roughly 8,000 years old, from the Windover bog near Titusville, in east-central Florida. The bones are being curated at Florida State University, and no Native Americans have requested their repatriation. Archaeologist Glenn Doran, who supervised excavation of the site in the 1980s, said efforts to sequence DNA have so far been unsuccessful due to the destructive effects of wet, highly acidic bog soils. "It's frustrating, but we are hoping that techniques will improve," Doran said. Researchers have done other types of analyses on the remains, which show a number of dissimilarities to modern Native Americans. Large sections of the bog remain unexcavated. (The site was purchased for safekeeping in 2013 by The Archaeological Conservancy.)

There are also those cases in which, rather than engaging in a nasty custody battle, scientists and Native Americans are in agreement as to the disposition of the remains. When a partial skeleton was discovered in On Your Knees Cave on Prince of Wales Island in Alaska in 1996, archaeologists immediately halted the excavation and consulted nearby Tlingit communities. Despite their initial reservations about collaborating with the archaeologists, the Tlingit saw a chance to validate their belief that their people had inhabited southeast Alaska for thousands of years.

As it turned out, analysis of the remains of the individual they called Shuká Káa (Man Ahead of Us) revealed that they were 10,300 years old—a discovery that supports theories that early inhabitants of North America were coastal navigators who roamed the Pacific Coast. DNA analysis concluded that he was ancestral to existing tribes in the Pacific Northwest. When his remains were finally reburied in 2007, the headstone read "Shuká Káa is testimony to our ancient occupancy of this land."

Archaeologists' collaboration with Athabaskan native communities has smoothed the investigation of even older remains at the Upward Sun River site in central Alaska, where two 11,500-year-old infant burials were discovered in 2013. Sequencing of maternally inherited DNA shows that the infants represent distinctly Native American lineages, and researchers say it lends support for the Beringian Standstill hypothesis, which holds that an early population, isolated for thousands of years in that region gave rise to all modern Native Americans.

"Collaboration between scientists and Native American groups is positive and we continue in our exploration of
what these children have to tell us about ancient Beringian lifeways," said University of Alaska archaeologist Ben Potter. "We have ongoing work on a number of fronts geared toward understanding paleodiet, seasonal dietary shifts of the mothers, seasonal mobility, and other topics." E. James Dixon of the University of New Mexico, one of the researchers involved in the Shuká Káa investigation, echoed Potter. "Archaeologists could do a much better job of partnering with tribal governments. Their perspective can enrich our role as archaeologists."

In 1968, construction workers at Mel Anzick's ranch near Wilsall, Montana, unearthed the remains of a two-year-old child buried in a collapsed rock shelter grave with a scattering of red ochre and more than 100 biface tools. The artifacts were produced by the Clovis, America's first clearly identifiable culture. Radiocarbon testing showed the remains to be roughly 12,600 years old.

Because the grave was on private property, the law did not require that local tribes be notified. Even so, when Anzick's daughter Sarah—who was inspired by this discovery to become a molecular biologist—sought to renew studies of the remains a few years ago, she apprised tribal leaders. Early attempts to sequence the child's DNA failed. Then, with the benefit of new techniques, Williams and a team of forty scientists, including one member of the local Crow tribe, successfully sequenced the child's genome. The results showed a common genetic heritage with today's native peoples, especially those in Central and South America. In 2014, the child's remains were quietly reburied in an emotion-laden traditional ceremony attended by the Anzicks, Williams, and the representatives of seven local tribes.

Williams was deeply touched by the ceremony, but he also acknowledged the loss to science due to advances in DNA analysis. "The research we did on the Anzick remains was not possible ten years ago," he said. "But things have advanced so rapidly that just the three years since he was buried that we could learn even more about him today." Nonetheless, he noted that much of the presumed distrust between scientists and indigenous communities is not based on reality. I have been approached by different groups that are interested in knowing what can be learned from these ancient ancestors. They want to control the destiny of these remains, but they are curious, just like you and me."

But part of the problem, he seems, is that Native Americans and scientists are often curious about different things. "Native Americans are not anti-science," said Kimberly Tall Bear, a member of the Sisseton Wahpeton Oyate of South Dakota and a professor of Native Studies at the University of Albert in Canada. "We merely want to assert our authority over our bodies, our lands, and the power of our stories. Many of the questions scientists ask are not important to us. Our creation stories and language carry information about our ancestors, too."

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